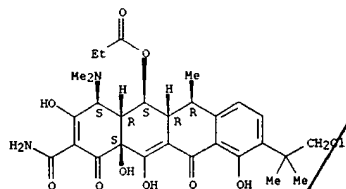


L6 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2000 ACS
 ACCESSION NUMBER: 1999:487218 CAPLUS
 DOCUMENT NUMBER: 131:116106
 TITLE: synthesis and antibacterial activity of tetracycline compds.
 INVENTOR(S): Levy, Stuart B.; Nelson, Mark L.
 PATENT ASSIGNEE(S): Trustees of Tufts College, USA
 SOURCE: PCT Int. Appl., 47 pp.
 CODEN: PIXX02
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9937307	A1	19990729	WO 1999-US1393	19990122
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TH				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 9924660	A1	19990809	AU 1999-24660	19990122
PRIORITY APPLN. INFO.: US 1998-PV72262 19980123 WO 1999-US1393 19990122				

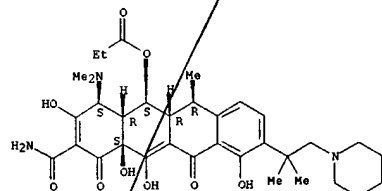
OTHER SOURCE(S): MARPAT 131:116106
 AB Synthesis of substituted tetracycline compds. (I) (R1 = alkyl, alkenyl, alkynyl, alkoxy, alkylthio, alkylsulfonfyl, alkylsulfonfyl, alkylamino, arylalkyl; R2 = alkanoyl, aroyl, alkylaroyl, carbacyclic aryl, heteroarom., alkyl, alkenyl, alkynyl, alkoxy, alkylthio, alkylsulfonfyl, alkylamino, arylalkyl; R3 = H, alkyl, alkenyl, alkynyl, alkoxy, alkylthio, alkylsulfonfyl, alkylsulfonfyl, alkylamino, arylalkyl, carbacyclic aryl, heteroarom., heteroalicyclic) that exhibit significant antibacterial activity, including gram-pos. and gram-neg. bacteria, and gram-pos. and gram-neg. tetracycline sensitive and tetracycline resistant

L6 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2000 ACS (Continued)



RN 233586-01-1 CAPLUS
 CN 2-Naphthacene-9-carboxamide, 4-(dimethylamino)-9-[(1,1-dimethyl-2-(1-piperidinylethyl)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-(1-oxopropoxy))- (9CI) (CA INDEX NAME)]

Absolute stereochemistry.



RN 233586-07-2 CAPLUS
 CN 2-Naphthacene-9-carboxamide, 5-(acetyloxy)-4-(dimethylamino)-9-[(1,1-dimethyl-2-(1-piperidinylethyl)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-(1-oxopropoxy))- (9CI) (CA INDEX NAME)]

Absolute stereochemistry.

L6 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2000 ACS (Continued)
 bacteria is presented. Thus, I (R1 = Me3C, R2 = EtCO, R3 = H) (II)

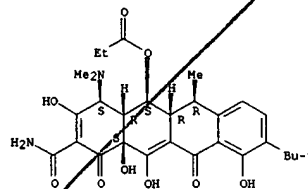
was prepd. in two steps by acylation of doxycycline with propionic acid followed by alkylation with t-butanol. II showed and MIC of 6.25 .mu.g/mL against methicillin resistant S. aureus.

IT 233585-95-0P 233586-00-0P 233586-01-1P
 233586-02-2P 233586-14-6P 233586-23-7P
 233586-24-8P 233586-26-0P

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (synthesis and antibacterial activity of tetracycline compds.)

RN 233585-95-0 CAPLUS
 CN 2-Naphthacene-9-carboxamide, 4-(dimethylamino)-9-[(1,1-dimethylethyl)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-(1-oxopropoxy))- (4S,4aR,5S,5aR,6R,12aS) - (9CI) (CA INDEX NAME)]

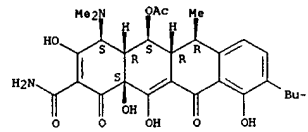
Absolute stereochemistry.



RN 233586-00-0 CAPLUS
 CN 2-Naphthacene-9-carboxamide, 5-(2-chloro-1,1-dimethylethyl)-4-(dimethylamino)-9-[(1,1-dimethylethyl)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-(1-oxopropoxy))- (4S,4aR,5S,5aR,6R,12aS) - (9CI) (CA INDEX NAME)]

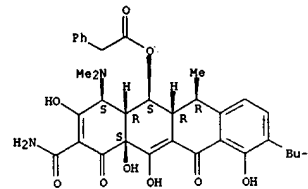
Absolute stereochemistry.

L6 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2000 ACS (Continued)



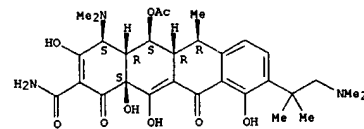
RN 233586-14-6 CAPLUS
 CN Benzeneacetic acid, (4S,4aR,5S,5aR,6R,12aS) -2-(aminocarbonyl)-4-(dimethylamino)-9-[(1,1-dimethylethyl)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-naphthacenyl ester (9CI) (CA INDEX NAME)]

Absolute stereochemistry.



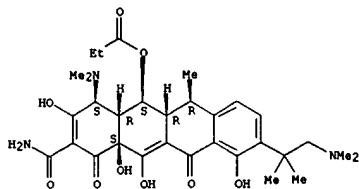
RN 233586-23-7 CAPLUS
 CN 2-Naphthacene-9-carboxamide, 5-(acetyloxy)-4-(dimethylamino)-9-[(2-(dimethylamino)-1,1-dimethylethyl)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-(1-oxopropoxy))- (4S,4aR,5S,5aR,6R,12aS) - (9CI) (CA INDEX NAME)]

Absolute stereochemistry.



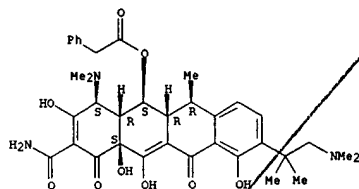
L6 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2000 ACS (Continued)
 RN 233586-24-8 CAPLUS
 CN 2-Naphthacene-carboxamide, 4-(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-(1-oxopropoxy)-, (4S,4aR,5S,5aR,6R,12aS)- (9CI)
 (CA INDEX NAME)

Absolute stereochemistry.



RN 233586-26-0 CAPLUS
 CN Benzeneacetic acid, (4S,4aR,5S,5aR,6R,12aS)-2-(aminocarbonyl)-4-(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-naphthacene ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 7
 REFERENCE (S):
 (1) Bernardi; US 3901942 A 1975
 (2) Levy; US 5258372 A 1978
 (4) Levy; US 5064821 A 1991 CAPLUS

L6 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2000 ACS
 ACCESSION NUMBER: 1999:487217 CAPLUS
 DOCUMENT NUMBER: 131:116105
 TITLE: synthesis and antibacterial activity of tetracycline-type compounds
 INVENTOR(S): Levy, Stuart B.; Nelson, Mark L.
 PATENT ASSIGNEE(S): Trustees of Tufts College, USA
 SOURCE: PCT Int. Appl., 56 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

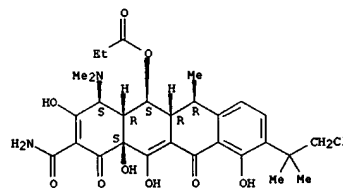
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 937306	A1	19990729	WO 1999-US1343	19990122
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 9923346	A1	19990809	AU 1999-23346	19990122
PRIORITY APPL. INFO.: AU 1998-PV72262 19980123				
WO 1999-US1343 19990122				

OTHER SOURCE(S): MARPAT 131:116105
 AB Synthesis of substituted tetracycline-type compds. (I) (R1 = alkyl, alkenyl, alkynyl, alkoxy, alkylthio, alkylsulfinyl, alkylsulfonyl, alkylamino, arylalkyl; R2 = alkanoyl, acetyl, alkylaroyl, carbacyclic aryl, heteroarom., alkyl, alkenyl, alkynyl, alkoxy, alkylthio, alkylsulfinyl, alkylsulfonyl, alkylamino, arylalkyl; R3 = H, alkyl, alkenyl, alkynyl, alkoxy, alkylthio, alkylsulfinyl, alkylsulfonyl, alkylamino, arylalkyl, carbacyclic aryl, heteroarom., heterocyclyclic) that exhibit significant antibacterial activity, including against both gram-pos. and gram-neg. bacteria is presented. Thus, I (R1 = Me3C, R2 = EtCO, R3 = H) (II) was prep'd. in two steps by acylation of doxycycline with propionic acid followed by alkylation with t-butanol. II showed an MIC of 6.25 .mu.g/mL against methicillin resistant S. aureus.
 IT 233586-00-0P
 RL: BAC (Biological activity or effector, except adverse); RCT (Reactant);

L6 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2000 ACS (Continued)
 (5) Levy; US 5589470 A 1996 CAPLUS
 (7) Trustees of Tufts College; WO 9308806 A1 1993 CAPLUS
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2000 ACS (Continued)
 SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (Synthesis and antibacterial activity of tetracycline-type compds.)
 RN 233586-00-0 CAPLUS
 CN 2-Naphthacene-carboxamide, 9-(2-chloro-1,1-dimethylethyl)-4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-(1-oxopropoxy)-, (4S,4aR,5S,5aR,6R,12aS)- (9CI) (CA INDEX NAME)

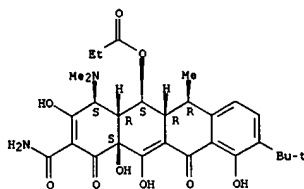
Absolute stereochemistry.



IT 233585-95-0P 233586-01-1P 233586-02-2P
 233586-14-6P 233586-23-7P 233586-24-6P
 233586-26-0P 233586-50-0P 233586-51-1P
 233586-55-5P 233586-56-6P 233586-57-7P
 233586-62-4P 233586-63-5P 233586-66-8P
 233586-68-0P 233586-69-1P 233586-71-5P
 RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (Synthesis and antibacterial activity of tetracycline-type compds.)
 RN 233585-95-0 CAPLUS
 CN 2-Naphthacene-carboxamide, 4-(dimethylamino)-9-(1,1-dimethylethyl)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-(1-oxopropoxy)-, (4S,4aR,5S,5aR,6R,12aS)- (9CI) (CA INDEX NAME)

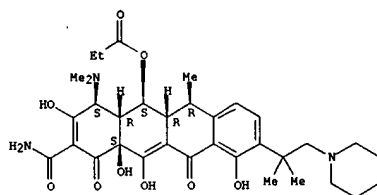
Absolute stereochemistry.

L6 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2000 ACS (Continued)



RN 233586-01-1 CAPLUS
 CN 2-Naphthacene-1-carboxamide, 4-(dimethylamino)-9-[1,1-dimethyl-2-(1-piperidinylethyl)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12-tetrahydroxy-6-methyl-1,11-dioxo-5-(1-oxopropoxy)-, (4S,4aR,5S,5aR,6R,12aS)- (9CI)
 (CA INDEX NAME)

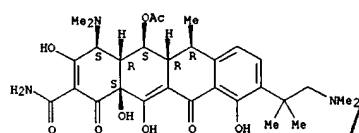
Absolute stereochemistry.



RN 233586-02-2 CAPLUS
 CN 2-Naphthacene-1-carboxamide, 5-(acetyloxy)-4-(dimethylamino)-9-[2-(dimethylethyl)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12-tetrahydroxy-6-methyl-1,11-dioxo-, (4S,4aR,5S,5aR,6R,12aS)- (9CI) (CA INDEX NAME)

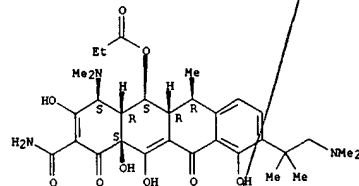
Absolute stereochemistry.

L6 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2000 ACS (Continued)



RN 233586-24-8 CAPLUS
 CN 2-Naphthacene-1-carboxamide, 4-(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12-tetrahydroxy-6-methyl-1,11-dioxo-5-(1-oxopropoxy)-, (4S,4aR,5S,5aR,6R,12aS)- (9CI)
 (CA INDEX NAME)

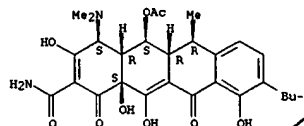
Absolute stereochemistry.



RN 233586-26-0 CAPLUS
 CN Benzeneacetic acid, (4S,4aR,5S,5aR,6R,12aS)-2-(aminocarbonyl)-4-(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12-tetrahydroxy-6-methyl-1,11-dioxo-5-naphthacene-1-carboxylate (9CI) (CA INDEX NAME)

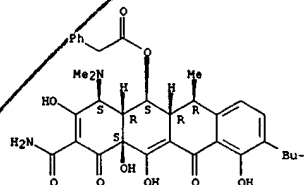
Absolute stereochemistry.

L6 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2000 ACS (Continued)



RN 233586-14-6 CAPLUS
 CN Benzeneacetic acid, (4S,4aR,5S,5aR,6R,12aS)-2-(aminocarbonyl)-4-(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12-tetrahydroxy-6-methyl-1,11-dioxo-5-naphthacene-1-carboxylate (9CI)
 (CA INDEX NAME)

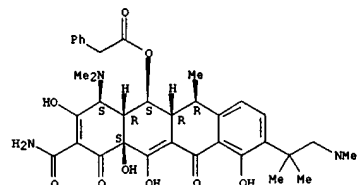
Absolute stereochemistry.



RN 233586-23-7 CAPLUS
 CN 2-Naphthacene-1-carboxamide, 5-(acetyloxy)-4-(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12-tetrahydroxy-6-methyl-1,11-dioxo-, (4S,4aR,5S,5aR,6R,12aS)- (9CI) (CA INDEX NAME)

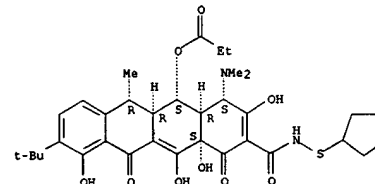
Absolute stereochemistry.

L6 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2000 ACS (Continued)



RN 233586-50-0 CAPLUS
 CN 2-Naphthacene-1-carboxamide, N-(cyclopentylthio)-4-(dimethylamino)-9-[1,1-dimethylethyl]-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12-tetrahydroxy-6-methyl-1,11-dioxo-5-(1-oxopropoxy)-, (4S,4aR,5S,5aR,6R,12aS)- (9CI)
 (CA INDEX NAME)

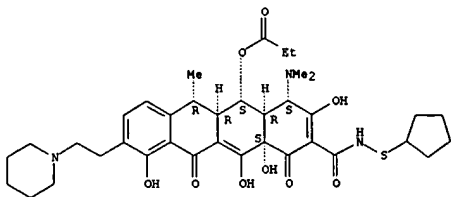
Absolute stereochemistry.



RN 233586-51-1 CAPLUS
 CN 2-Naphthacene-1-carboxamide, N-(cyclopentylthio)-4-(dimethylamino)-9-[1,1-dimethylethyl]-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12-tetrahydroxy-6-methyl-1,11-dioxo-5-(1-oxopropoxy)-9-[2-(1-piperidinylethyl)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12-tetrahydroxy-6-methyl-1,11-dioxo-5-(1-oxopropoxy)-, (4S,4aR,5S,5aR,6R,12aS)- (9CI) (CA INDEX NAME)

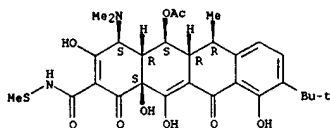
Absolute stereochemistry.

L6 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2000 ACS (Continued)



RN 233586-57-7 CAPLUS
CN Pentanoic acid, (4S,4aR,5S,5aR,6R,12aS)-4-(dimethylamino)-9-(1,1-dimethylethyl)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-2-[(propylthio)amino]carbonyl]-5-naphthacenyl ester (9CI) (CA INDEX NAME)

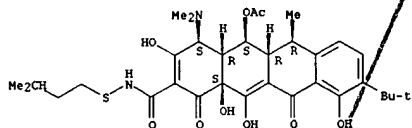
Absolute stereochemistry.

[illegible]

RN 233586-62-4 CAPIUS
CN 2-Naphthacene-carboxamide, 5-(acetyloxy)-4-(dimethylamino)-9-(1,1-dimethylethyl)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-N-[(3-methylbutyl)thio]-11,11-dioxo-, (4S,4aR,5S,5aR,6R,12aS)-
(9CI)
(CA INDEX NAME)

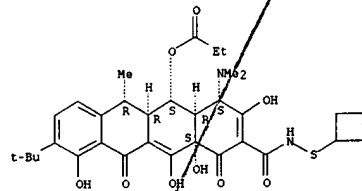
Absolute stereochemistry.

L6 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2000 ACS (Continued)



RM	233586-68-0	CAPLUS
CN	2-Naphthacene-carboxamide, 5-(acetyloxy)-N-(cyclopentylthio)-4-(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-, (4S,4aR,5S,5aR,6R,12aS)- (9CI) (CA INDEX NAME)	

Absolute stereochemistry

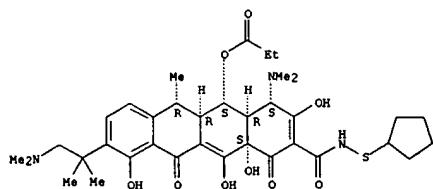


Chemical structure of a substituted tetracycline derivative. The structure shows a tetracycline core with various substituents: a dimethylaminoethyl group at C-7, a methyl group at C-11, an acetoxy group at C-12, a dimethylamino group at C-13, and a thioether group at C-4. Stereochemistry is indicated with R and S labels.

RN	233586-69-1	CAPLUS
CN	2-Naphthalenecarboxamide, N-(cyclopentylthio)-4-(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-(1-oxopropoxy)-, (4S,4aR,5S,5aR,6R,12aS)- (9CI) (CA INDEX NAME)	

Absolute stereochemistry.

L6 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2000 ACS (Continued)

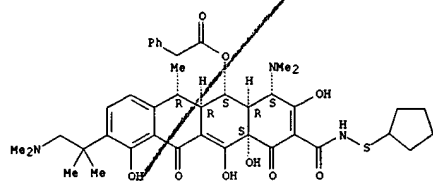


RN 233586-71-5 CAPLUS

CN Benzeneacetic acid, (4S,4aR,5S,5aR,6R,12aS)-2-

[[[(cyclopentylthio)amino]carbonyl]-4-(dimethylamino)-9-[2-(dimethylamino)-1,1-dimethylethyl]-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-naphthacenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT:

1

REFERENCE(S): (1) Su: US 5834450 A 1998

=> d ibib ab hitstr

L13 ANSWER 1 OF 1 USPATFULL

ACCESSION NUMBER: 75:43716 USPATFULL

TITLE: Tetracycline derivatives substituted in the 7 position

INVENTOR(S): and process for preparing the same
Bernardi, Luigi, Milan, Italy
Colonna, Vincenzo, Milan, Italy
De Castiglione, Roberto, Milan, ItalyPATENT ASSIGNEE(S): Masi, Paolo, Milan, Italy
Societa' Farmaceutici Italia S.p.A., Milan, Italy
(non-U.S. corporation)

	NUMBER	DATE
PATENT INFORMATION:	US 3901942	19750826
APPLICATION INFO.:	US 1973-397691	19730917 (5)

	NUMBER	DATE
PRIORITY INFORMATION:	IT 1972-29328	19720918
DOCUMENT TYPE:	Utility	
PRIMARY EXAMINER:	Davis, C.	
LEGAL REPRESENTATIVE:	Hubbell, Cohen & Stiefel	
NUMBER OF CLAIMS:	5	
EXEMPLARY CLAIMS:	1,2	
LINE COUNT:	725	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Process for the preparation of tetracycline derivatives substituted in the 7 position comprising first obtaining tetracycline derivatives substituted in the 7 and 9 positions, transforming the substituent in the 7 position into the desired substituent, and then eliminating the substituent in the 9 position. Invention further comprises products obtained during the course of the above process.

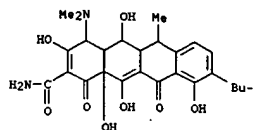
IT 53108-30-8P
(prepn. of)

RN 53108-30-8 USPATFULL

CN 2-Naphthacenecarboxamide, 4-(dimethylamino)-9-(1,1-dimethylethyl)-

1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo- (9CI) (CA INDEX NAME)

L13 ANSWER 1 OF 1 USPATFULL (Continued)



=> d ibib ab hitstr 1-3

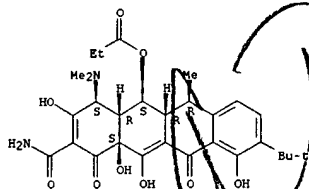
L14 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2000 ACS
 ACCESSION NUMBER: 1999:487218 CAPLUS
 DOCUMENT NUMBER: 131:116106
 TITLE: synthesis and antibacterial activity of tetracycline compds.
 INVENTOR(S): Levy, Stuart B.; Nelson, Mark L.
 PATENT ASSIGNEE(S): Trustees of Tufts College, USA
 SOURCE: PCT Int. Appl., 47 pp.
 CODES: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9937307	A1	19990729	WO 1999-US1393	19990122
DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, BG, BR, CA, CH, CN, CU, CZ, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				

PRIORITY APPL. INFO.: AU 9924660 A1 19990809 AU 1999-24660 19990122
 US 1998-PV72262 19980123
 WO 1999-US1393 19990122

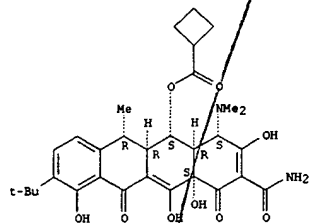
OTHER SOURCE(S): MARPAT 131:116106
 AB Synthesis of substituted tetracycline compds. (I) (R1 = alkyl, alkenyl, alkynyl, alkoxy, alkylthio, alkylsulfenyl, alkylsulfonyl, alkylamino, arylalkyl; R2 = alkanoyl, aroyl, alkylaroyl, carbacyclic aryl, heteroarom., alkyl, alkenyl, alkynyl, alkoxy, alkylthio, alkylsulfenyl, alkylsulfonyl, alkylamino, arylalkyl; R3 = H, alkyl, alkenyl, alkynyl, alkoxy, alkylthio, alkylsulfenyl, alkylsulfonyl, alkylamino, arylalkyl, carbacyclic aryl, heteroarom., heteroalicyclic) that exhibit significant antibacterial activity, including gram-pos. and gram-neg. bacteria, and gram-pos. and gram-neg. tetracycline sensitive and tetracycline resistant

L14 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2000 ACS (Continued)



RN 233585-96-1 CAPLUS
 CN Cyclobutanecarboxylic acid, (4S,4aR,5S,5aR,6R,12aS)-2-(aminocarbonyl)-4-(dimethylamino)-9-(1,1-dimethylethyl)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-naphthacenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



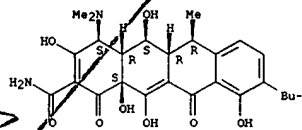
RN 233586-02-2 CAPLUS
 CN 2-Naphthacenecarboxamide, 5-(acetyloxy)-4-(dimethylamino)-9-(1,1-dimethylethyl)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-, (4S,4aR,5S,5aR,6R,12aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L14 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2000 ACS (Continued)
 bacteria is presented. Thus, I (R1 = Me3C, R2 = EtCO, R3 = H) (II) was prep. in two steps by acylation of doxycycline with propionic acid followed by alkylation with t-butanol. II showed MIC of 6.25 .mu.g/ml against methicillin resistant S. aureus

IT 233585-94-9P 233585-95-0P 233585-96-1P
 233586-02-2P 233586-13-5P 233586-14-6P
 233586-15-7P 233586-16-8P 233586-17-9P
 233586-18-0P 233587-82-1P
 RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (synthesis and antibacterial activity of tetracycline compds.)
 RN 233585-94-9 CAPLUS
 CN 2-Naphthacenecarboxamide, 4-(dimethylamino)-9-(1,1-dimethylethyl)-1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-, (4S,4aR,5S,5aR,6R,12aS)- (9CI) (CA INDEX NAME)

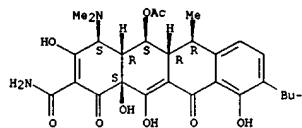
Absolute stereochemistry.



RN 233585-95-0 CAPLUS
 CN 2-Naphthacenecarboxamide, 4-(dimethylamino)-9-(1,1-dimethylethyl)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-(1-oxopropoxy)-, (4S,4aR,5S,5aR,6R,12aS)- (9CI) (CA INDEX NAME)

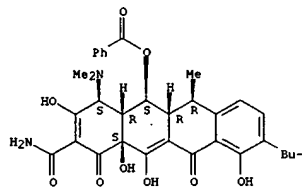
Absolute stereochemistry.

L14 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2000 ACS (Continued)



RN 233586-13-5 CAPLUS
 CN 2-Naphthacenecarboxamide, 5-(benzoyloxy)-4-(dimethylamino)-9-(1,1-dimethylethyl)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-, (4S,4aR,5S,5aR,6R,12aS)- (9CI) (CA INDEX NAME)

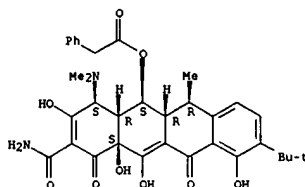
Absolute stereochemistry.



RN 233586-14-6 CAPLUS
 CN Benzeneacetic acid, (4S,4aR,5S,5aR,6R,12aS)-2-(aminocarbonyl)-4-(dimethylamino)-9-(1,1-dimethylethyl)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-naphthacenyl ester (9CI) (CA INDEX NAME)

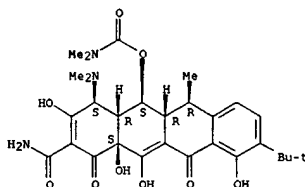
Absolute stereochemistry.

L14 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2000 ACS (Continued)



RN 233586-15-7 CAPLUS
CN Carbamic acid, dimethyl-, (4S,4aR,5S,5aR,6R,12aS)-2-(aminocarbonyl)-4-(dimethylamino)-9-(1,1-dimethylethyl)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-naphthacenyl ester
(9CI)
(CA INDEX NAME)

Absolute stereochemistry.

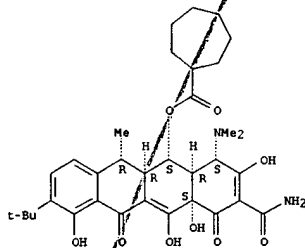


RN 233586-16-8 CAPLUS
CN Cyclopentanecarboxylic acid,
(4S,4R,5S,5R,6R,12aS)-2-(aminocarbonyl)-4-
(dimethylamino)-9-(1,1-dimethylethyl)-1,4,4a,5,5a,6,11,12a-octahydro-
3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-naphthacenyl ester
(9CI)
(CA INDEX NAME)

Absolute stereochemistry.

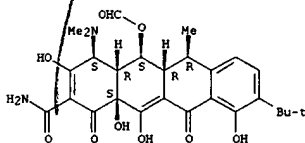
L14 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2000 ACS (Continued)
3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-naphthacenyl ester
(9CI)
(CA INDEX NAME)

Absolute stereochemistry.



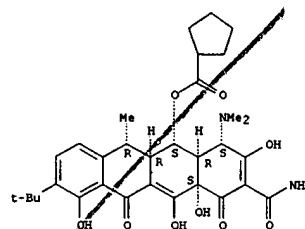
RN 233587-82-1 CAPLUS
CN 2-Naphthacene-carboxamide, 4-(dimethylamino)-9-(1,1-dimethylethyl)-5-(formyloxy)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-, 1,1-dioxo-, (4S,4aR,5S,5aR,6R,12aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



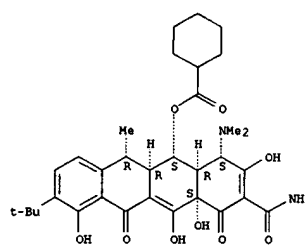
REFERENCE COUNT: 7
REFERENCE(S):
(1) Bernardi; US 3901942 A 1975
(2) Levy; US 5258372 A 1978
(3) Levy; US 5064821 A 1991 CAPLUS
(5) Levy; US 5589470 A 1996 CAPLUS
(7) Trustees Of Tufts College; WO 9308806 A1 1993
CAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 1 OF 3 CAPIUS COPYRIGHT 2000 ACS (Continued)



RN 233586-17-9 CAPLUS
CN Cyclohexanecarboxylic acid,
(4S,4aR,5S,5aR,6R,12aS)-2-(aminocarbonyl)-4-
(dimethylamino)-9-(1,1-dimethylethyl)-1,4,4a,5,5a,6,11,12a-octahydro-
3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-naphthacenyl ester
(9CI)
(CA INDEX NAME)

Absolute stereochemistry.



RN 233586-18-0 CAPIUS
CN Cycloheptanecarboxylic acid,
(4S,4aR,5S,5aR,6R,12aS)-2-(aminocarbonyl)-4-
(dimethylamino)-9-(1,1-dimethylethyl)-1,4,4a,5,5a,6,11,12a-octahydro-

L14 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2000 ACS
ACCESSION NUMBER: 1999:487217 CAPLUS
DOCUMENT NUMBER: 131:116105
TITLE: synthesis and antibacterial activity of
tetracycline-type compounds
INVENTOR(S): Levy, Stuart B.; Nelson, Mark L.
PATENT ASSIGNEE(S): Trustees of Tufts College, USA
SOURCE: PCT Int. Appl., 56 pp.
CODEN: PIXX02
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	WO 9937306	A1	19990729	WO 1999-US1343	19990122
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DE,		DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS,			
JP,		KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK,			
MN,		MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ,			
TM,		TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD,			
RU,		TJ, TM			
	RW:	GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK,			
ES,		FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG,			
CI,		CH, CA, GN, GW, ML, MR, NE, SN, TD, TG			
	AU 9923346	A1	19990809	AU 1999-23346	19990122
PRIORITY APPLN. INFO.:				US 1998-PT27262	19980123
				WO 1999-US1343	19990122

OTHER SOURCE(S): MARPAT 131:116105 NO 1995-031454 19990122

AB Synthesis of substituted tetracycline-type compounds. (I) (R1 = alkyl, alkenyl, alkynyl, alkoxy, alkylthio, alkylsulfinyl, alkylsulfonyl, alkylamino, arylalkyl; R2 = alkanoyl, aroyl, alkylaroyl, carbacyclic aryl, heteroarom., alkyl, alkenyl, alkynyl, alkoxy, alkylthio, alkylsulfinyl, alkylamino, arylalkyl; R3 = H, alkyl, alkenyl, alkynyl, alkoxy, alkylthio, alkylsulfinyl, alkylsulfonyl, alkylamino, arylalkyl, carbacyclic aryl, heteroarom., heteroalicyclic) that exhibit significant antibacterial activity, including against both gram-pos. and gram-neg. bacteria is presented. Thus, I (R1 = Me3C, R2 = EtCO, R3 = H) (II) was prepd. in two steps by acylation of doxycycline with propionic acid followed by alkylation with t-butanol. II showed an MIC of 6.25 μ g/ml against methicillin resistant *S. aureus*.

IT 233585-94-9P 233585-95-0P 233585-96-1P
233586-02-2P 233586-13-5P 233586-14-5P

L14 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2000 ACS (Continued)

233586-15-7P 233586-16-8P 233586-17-9P

233586-18-0P

RL: BAC (Biological activity or effector, except adverse); SPN

(Synthetic

preparation); THU (Therapeutic use); BIOL (Biological study); PREP

(Preparation); USES (Uses)

(Synthesis and antibacterial activity of tetracycline-type compds.)

RN

233585-94-9 CAPLUS

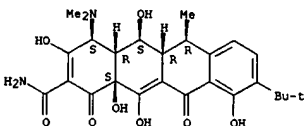
CN

2-Naphthacene-9-carboxamide, 4-(dimethylamino)-9-(1,1-dimethylethyl)-

1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methyl-1,11-

dioxo-, (4S,4aR,5S,5aR,6R,12aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

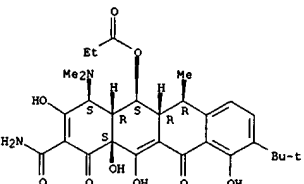


RN 233585-95-0 CAPLUS

CN

2-Naphthacene-9-carboxamide, 4-(dimethylamino)-9-(1,1-dimethylethyl)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-(1-oxopropoxy)-, (4S,4aR,5S,5aR,6R,12aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

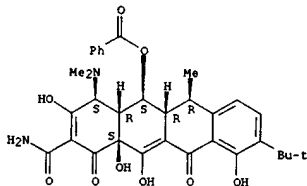


RN 233585-96-1 CAPLUS

CN

Cyclobutanecarboxylic acid, (4S,4aR,5S,5aR,6R,12aS)-2-(aminocarbonyl)-4-

L14 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2000 ACS (Continued)



RN 233586-14-6 CAPLUS

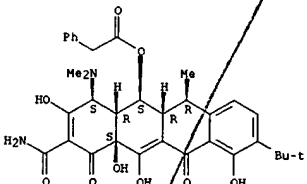
CN

Benzeneacetic acid, (4S,4aR,5S,5aR,6R,12aS)-2-(aminocarbonyl)-4-(dimethylamino)-9-(1,1-dimethylethyl)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-naphthacenyl ester

(9CI)

(CA INDEX NAME)

Absolute stereochemistry.



RN 233586-15-7 CAPLUS

CN

Carbamic acid, dimethyl-, (4S,4aR,5S,5aR,6R,12aS)-2-(aminocarbonyl)-4-(dimethylamino)-9-(1,1-dimethylethyl)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-naphthacenyl ester

(9CI)

(CA INDEX NAME)

Absolute stereochemistry.

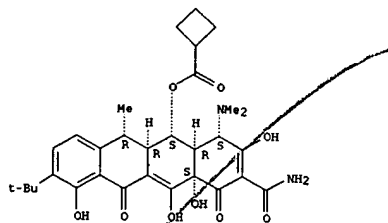
L14 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2000 ACS (Continued)

(dimethylamino)-9-(1,1-dimethylethyl)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-naphthacenyl ester

(9CI)

(CA INDEX NAME)

Absolute stereochemistry.

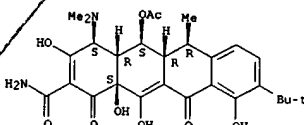


RN 233586-02-2 CAPLUS

CN

2-Naphthacene-9-carboxamide, 5-(acetyloxy)-4-(dimethylamino)-9-(1,1-dimethylethyl)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-, (4S,4aR,5S,5aR,6R,12aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



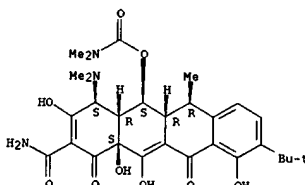
RN 233586-13-5 CAPLUS

CN

2-Naphthacene-9-carboxamide, 5-(benzyloxy)-4-(dimethylamino)-9-(1,1-dimethylethyl)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-, (4S,4aR,5S,5aR,6R,12aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L14 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2000 ACS (Continued)



RN 233586-16-8 CAPLUS

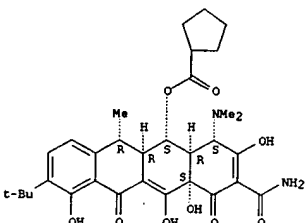
CN

Cyclopentanecarboxylic acid, (4S,4aR,5S,5aR,6R,12aS)-2-(aminocarbonyl)-4-(dimethylamino)-9-(1,1-dimethylethyl)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-naphthacenyl ester

(9CI)

(CA INDEX NAME)

Absolute stereochemistry.



RN 233586-17-9 CAPLUS

CN

Cyclohexanecarboxylic acid, (4S,4aR,5S,5aR,6R,12aS)-2-(aminocarbonyl)-4-(dimethylamino)-9-(1,1-dimethylethyl)-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-naphthacenyl ester

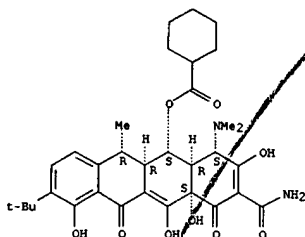
(9CI)

(CA INDEX NAME)

Absolute stereochemistry.

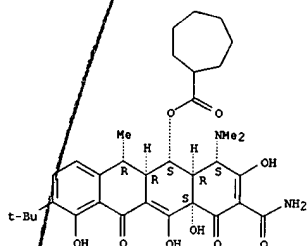
L14 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2000 ACS (Continued)

L14 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2000 ACS (Continued)



RN 233586-18-0 CAPLUS
 CN Cycloheptanecarboxylic acid,
 (4S,4aR,5S,5aR,6R,12aS)-2-(aminocarbonyl)-4-
 (dimethylamino)-9-(1,1-dimethylethyl)-1,4,4a,5,5a,6,11,12a-octahydro-
 3,10,12,12a-tetrahydroxy-6-methyl-1,11-dioxo-5-naphthacenyl ester
 (9CI)
 (CA INDEX NAME)

Absolute stereochemistry.

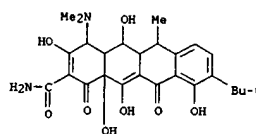


REFERENCE COUNT: 1
 REFERENCE(S): (1) Su; US 5834450 A 1998

L14 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2000 ACS
 ACCESSION NUMBER: 1974:477746 CAPLUS
 DOCUMENT NUMBER: 81:77746
 TITLE: Tetracycline derivatives
 INVENTOR(S): Bernardi, Luigi; Colonna, Vincenzor De
 Castiglione,
 PATENT ASSIGNEE(S): Roberto Masi, Paolo
 Societa Farmaceutici Italia
 SOURCE: Ger. Offen., 39 pp.
 CODEN: GWKXBX
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

L14 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2000 ACS (Continued)

1,4,4a,5,5a,6,11,12a-octahydro-3,5,10,12,12a-pentahydroxy-6-methyl-1,11-
 dioxo- (9CI) (CA INDEX NAME)



PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2346535	A1	19740411	DE 1973-2346535	19730915
DE 2346535	B2	19800911		
DE 2346535	C3	19810521		
NL 7312648	A	19740320	NL 1973-12648	19730913
NL 158172	B	19781016		
CA 999855	A1	19761116	CA 1973-181034	19730913
FR 2208885	A1	19740628	FR 1973-33067	19730914
JP 49069653	A2	19740705	JP 1973-104458	19730914
JP 57041458	B4	19820903		
ZA 7307317	A	19740925	ZA 1973-7317	19730914
AU 7560333	A1	19750320	AU 1973-60333	19730914
BE 804913	A1	19740318	BE 1973-135695	19730917
AT 7307996	A	19750615	AT 1973-7996	19730917
AT 328613	B	19760325		
US 3901942	A	19750826	US 1973-397691	19730917
GB 1413347	A	19751112	GB 1973-43564	19730917
HU 167850	P	19751225	HU 1973-501098	19730917
ES 418809	A1	19760316	ES 1973-418809	19730917
SU 574145	D	19770925	SU 1973-1957942	19730917
			IT 1972-29328	19720918

PRIORITY APPLN. INFO.:
 AB Tetracycline derivs. I (R = H, R1 = e.g., Me, NH2, Me2NCH2,
 F3CCONHCH2, R2
 = H, Me; R3 = H, OH) were prepd. by the selective alkylation of a
 tetracycline deriv. in the 9-position, followed by electrophilic
 substitution in the 7-position and dealkylation. Thus, I (R = R1 =
 R2 =
 R3 = H) was alkylated with Me2C:CH2 in (Me2N)3PO to give I (r = Me3C;
 R1 =
 R2 = R3 = H) which was nitrated with KNO3 and HF, then hydrogenated
 over
 PtO2 to give I (R = Me3C, R1 = NH2, R2 = R3 = H). Reaction of this
 product with HCHO in the presence of Pd-C followed by dealkylation
 with
 F3CSO3H in PhOMe gave I (R = R2 = R3 = H, R1 = Me2N). About 20 I were
 prepd.
 IT 53108-30-8p
 RL: SPW (Synthetic preparation); PREP (Preparation)
 (prepn. of)
 RN 53108-30-8 CAPLUS
 CN 2-Naphthacene-carboxamide, 4-(dimethylamino)-9-(1,1-dimethylethyl)-

09/234,847

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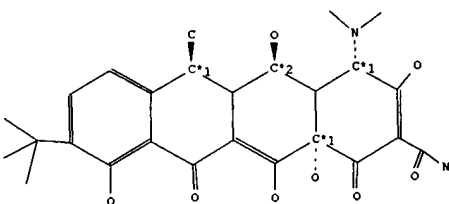
L15 ANSWER 1 OF 1 BEILSTEIN COPYRIGHT 2000 BEILSTEIN CD&S

Beilstein Reg. No. (BRN): 2199135 Beilstein
 Molecular Formula (MF): C₂₆H₃₂N₂O₈
 Synonym (SY): 9-*t*-Butyl-.alpha.-6-deoxy-5-hydroxytetracyclin
 Autonom Name (AUN): 9-*t*-butyl-4-dimethylamino-3,5,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-1,4,4a,5,5a,6,11,12a-octahydro-naphthacene-2-carboxylic acid amide
 Beilstein Reference (SO): 5-14
 General Comments (NTE): Stereo compound
 CAS Reg. No. (RN): 53108-30-8
 Beilstein Pref. RN (BPR): 53108-30-8
 Formula Weight (FW): 500.55
 Lawson Number (LN): 16308, 2817

Ring System Data:

Number of Rings (CNR): 4
 Ring Systems (CNRS): 1
 Diff. Ring Systems (CNDRS): 1
 Ring Heteros (CNRH): 0
 Acyclic Heteros (CNAH): 10

Beilstein Ring Index (BRIK)	Ring System Formula (RF)	BRIK Count
18.4.12-0.0-5.3	C ₁₈	1



Atom/Bond Notes:
 1. CIP Descriptor: S
 2. CIP Descriptor: R

Preparation:

L15 ANSWER 1 OF 1 BEILSTEIN COPYRIGHT 2000 BEILSTEIN CD&S (Continued)

Reference(s):
 1. Patent: Soc. Farm. Italia, DE 2346535 1974
 Chem. Abstr., 81, 77746

CTUNCH Unchecked Data: NMR

Reference(s):
 1. Patent: Soc. Farm. Italia, DE 2346535 1974
 Chem. Abstr., 81, 77746

CTUNCH Unchecked Data: UV/VIS

Reference(s):
 1. Patent: Soc. Farm. Italia, DE 2346535 1974
 Chem. Abstr., 81, 77746

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(FILE 'HOME' ENTERED AT 15:20:22 ON 03 JUN 2000)

FILE 'REGISTRY' ENTERED AT 15:20:26 ON 03 JUN 2000

L1 STRUCTURE UPLOADED
L2 5 S L1
L3 STRUCTURE UPLOADED
L4 0 S L3
L5 19 S L3 FULL

FILE 'CAPLUS' ENTERED AT 15:24:06 ON 03 JUN 2000

L6 2 S L5

FILE 'USPATFULL' ENTERED AT 15:25:14 ON 03 JUN 2000

L7 0 S L5

FILE 'MARPAT' ENTERED AT 15:25:26 ON 03 JUN 2000

L8 0 S L5

FILE 'BEILSTEIN' ENTERED AT 15:25:53 ON 03 JUN 2000

L9 0 S L3 FULL
L10 STRUCTURE UPLOADED

FILE 'REGISTRY' ENTERED AT 15:28:01 ON 03 JUN 2000

L11 1 S L10
L12 12 S L10 FULL

FILE 'USPATFULL' ENTERED AT 15:28:40 ON 03 JUN 2000

L13 1 S L12

FILE 'CAPLUS' ENTERED AT 15:30:00 ON 03 JUN 2000

L14 3 S L12

FILE 'BEILSTEIN' ENTERED AT 15:33:26 ON 03 JUN 2000

L15 1 S L10 FULL

FILE 'REGISTRY' ENTERED AT 15:34:08 ON 03 JUN 2000